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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/619,917 | 07/20/2000 | Toshio Nomura | 49982(551) | 3874 |

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| EXAMINER | |
|---|---|
| TRAN, NHAN T | |
| **ART UNIT** | **PAPER NUMBER** |
| 2615 | |

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/619,917 | NOMURA ET AL. | |
| | Examiner | Art Unit | |
| | Nhan T. Tran | 2615 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *09 June 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-3 and 6-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3 and 6-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed 6/9/2005 have been fully considered but they are not persuasive.

The Applicant's arguments are irrelevant to the Applicant's claimed invention as recited in the independent claims 1 & 10. The Applicant argues that Ahmad does not teach or suggest to take *an image as a background/object image after a first predetermined time has elapsed* and to take *a second image including only an object after a second predetermined time has elapsed* as recited in claims 1 & 10 (Remarks, page 5). It is submitted that the Applicant's arguments are not corresponding to the independent claims 1 & 10 which clearly require taking **a first image** including **ONLY a background but not an object** when a first predetermined period of time is measured, and taking **a second image including the object** when a second predetermined period of time is further measured. Thus, the Examiner cannot consider the Applicant's arguments. Therefore, only the claims themselves are considered.

In addition, the Applicant states that Ahmad does not teach or suggest to update a first image using an image of region other than the object region of the second image every time a prescribed period is elapsed as recited in claims 1 & 10 (Remarks, page 7). In response, the Examiner respectfully disagrees with the Applicant. It is stated in the previous Office Action that Ahmad shows, in Fig. 3A, steps 302-306, col. 6, line 37 – col. 7, line 47, the background image (a first image) is updated by using other background image which is clearly other than the object region of the second image to obtain a final background image (the object image is later

captured at step 314). The prescribed period is the feedback loop at step 306. Since in order for the feedback loop to function, the CPU 102 is set to periodically check at step 306 when a prescribed period is elapsed to perform a feedback for updating the background image until a final background image is completed depending on iterations preset by the user. It is noted that the claimed "taking a first image" reads on the whole process of steps 302-306 until the final background image (the first image) is completed.

In view of the above and the following sections, the examiner submits that the combination of Ahmad, Parulski and Aono meets the Applicant's claimed invention.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 8 recites the limitation "said data." There is insufficient antecedent basis for this limitation in the claim because there are different data such as "data of positional information, and one of data representing said second image and image data..." recited in claim 2 which claim 8 depends upon.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-3, 6, 7 & 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahmad (US 6,532,022) in view of Parulski et al (US 5,914,748).

Regarding claim 1, Ahmad discloses an image pickup apparatus (Fig. 2) taking a first image including *only* a background (204, Fig. 2) but not an object (Fig. 3A) and a second image including the object (202), and having a shutter button for releasing a shutter (see col. 6, line 37 – col. 7, line 47, wherein a shutter button is inherent, either located in the camera 200 or on computer 206, in order for the imaging apparatus to function as disclosed);

an output selecting portion (computer 206) outputting an image taken as *one of* the first and second images in a first time (steps 302-306; Fig. 3A) and outputting an image taken as the other of the first and second images in a second time after the first time (step 314; Fig. 3A), wherein the first image is updated by using an image of a region other than the object region of the second image every time a prescribed period (feedback loop 302-306 shown in Fig. 3A) is elapsed. See col. 6, line 37 – col. 7, line 47. It should be noted that the background image 202 is updated by using other background image, which is clearly other than the object region of the second image, to obtain a final background image by averaging background images.

Ahmad does not specifically teach that a time measuring portion for measuring a predetermined time after the shutter is pressed and that a first image is taken when a first predetermined period of time is measured and a second image is taken when a second predetermined period of time is measured. However, as taught by Parulski, in a compositing

mode, an image of a background only and an image including the background and an object are taken separately and automatically after a predetermined period of time (every 10 seconds) *after the shutter button is pressed* (see Figs. 3B & 4B; col. 4, lines 50-55).

Therefore, it would have been obvious to one of ordinary skill in the art to modify the imaging system in Ahmad in view of the teaching of Parulski such that the first image would be taken and outputted when a first predetermined period of time (i.e., 10 seconds) being measured by a time measuring portion, and the second image would be taken and outputted when a second predetermined period of time (i.e., another 10 seconds) after the first period of time being measured by the time measuring portion so as to enable automatic capturing mode in an obvious configuration over a manual mode in an imaging system.

Regarding claim 2, Ahmad also discloses a region extracting portion (computer 206; Figs. 3B & 8A) using said first and second images for outputting information of an object region of said second image; and a recording portion (computer 206) recording data of positional information (location of each pixel) of said object region, and one of data representing said second image and image data included in said object region onto a recording region. See col. 7, lines 41-47 and col. 10, lines 16-50.

Regarding claim 3, see the analysis of claim 2. Furthermore, Ahmad discloses that an image composing portion (computer 206) replaces an image in a region other than the object region of the second image with a prepared background image and recording portion recording

data of the image composed by the image composing portion onto a recording medium of the computer 206 (see image 208 in Fig. 2; step 326; col. 8, lines 10-21).

Regarding claim 6, see the analyses of claims 2 & 3 and col. 6, line 37 – col. 7, line 47.

Regarding claim 7, although Parulski teaches that the first and second images are separately taken at predetermined time periods, Parulski and Ahmad do not explicitly teach a notifying portion notifying a timing at which pickup of the first image is finished and a timing at which pickup of the second image is started. An Official Notice is taken that it is well known in the art to include a notifying portion the notifying the timing of a picture-taking event, such as a red-flashing LED or a buzzer.

Therefore, it would have been obvious to one of ordinary skill in the art to include the notifying portion notifying a timing at which pickup of the first image would be finished and a timing at which pickup of said second image would be started so as to alert the user to the timing of the end of the first exposure and the beginning of the second exposure further allowing the user the chance to place the subject within the field of view of the image taking apparatus so as to correctly obtain the combination of a first image with only a background and a second image with the background and a subject.

Regarding claim 10, see the analysis of claim 1.

4. Claims 8 & 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahmad and Parulski et al as applied to claims 1-3 and in further view of Aono et al (US 5,267,333).

Regarding claims 8 & 9, Ahmad and Parulski are silent about recording image data in a compressed form. However, it is well known in the art that image data of background and foregrounds or objects are recorded in compressed form so as to reduce quantity of data used in image synthesis without impairing the quality of image as suggested by Aono, col. 3, lines 1-22.

Therefore, it would have been obvious to one of ordinary skill in the art to implement a compression engine in the combination of Ahmad and Parulski to compress image data before recording onto the recording portion so that quantity of data used in image synthesis would be reduced without impairing the quality of the image.

***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhan T. Tran whose telephone number is (571) 272-7371. The examiner can normally be reached on Monday - Thursday, 7:30am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NT.

DAVID L. OMETZ
SUPERVISORY PATENT
EXAMINER